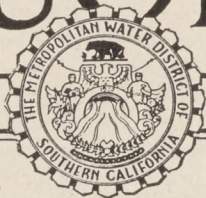


• COLORADO RIVER •  
**AQUEDUCT NEWS**

THE METROPOLITAN WATER DISTRICT

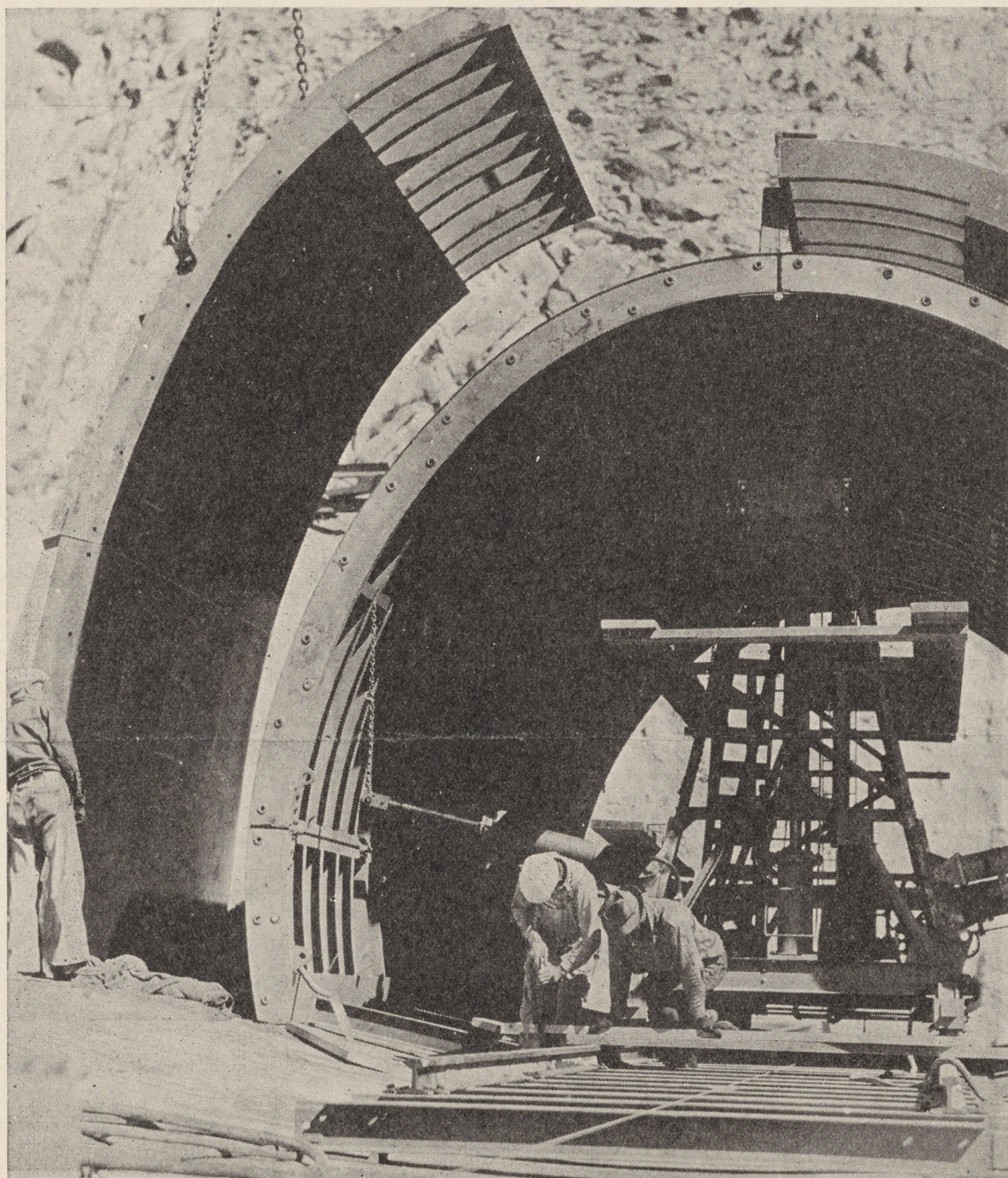


OF SOUTHERN CALIFORNIA

Vol. II

MARCH 5, 1935

No. 5



Thompson-Starrett crew placing steel forms for Colorado River Aqueduct conduit section near Eagle Mountain.



# **COLORADO RIVER AQUEDUCT NEWS**

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

LOS ANGELES, CALIFORNIA

*Published twice monthly in the interest of Field and Office Workers on the Colorado River Aqueduct, and for the information of all other citizens of the Metropolitan Water District.*

Vol. II March 5, 1935 No. 5

## **AS IT SHOULD BE**

As work on the Colorado River Aqueduct progresses, increasing numbers of Southern California citizens and visitors from all parts of the world are attracted to it.

It is gratifying to hear what these people say when they return from visits along the aqueduct. They comment with amazement, of course, upon the huge size of the job and upon the rapid pace at which it is being carried forward by the District and its contractors.

This, however, is not all they say. What is particularly gratifying are their enthusiastic reports on the courtesy and hospitality with which they were received along the aqueduct by employees of the District and contractors alike. Their favorable comments upon the physical characteristics of the aqueduct are equalled only by their comments upon the personnel which is doing the job.

And this is as it should be. No aqueduct executive or workman should ever forget that, in the last analysis, these people—citizens of the District—are his employers. It is they who have made construction of the aqueduct possible, and who will buy its water and pay the bills.

## **HEARTS AND FLOWERS**

Once again ye editor finds tear drops coursing downe his cheekes as he notes how few and far between are ye news items which trickle in from ye correspondents in ye fielede.

Or, to put it in less classic language—how about a few dispatches from the front? The editor has the firm conviction that NEWS readers would prefer to peruse items about Chucktender Hiram Kinklestein getting married, acquiring a new job, or a new baby—than they would items about the District buying umpty-ump tons of deformed steel bars for concrete reinforcing.

But remember, kind friends, we said items. The size of the NEWS will not permit it becoming a poetry anthology or a testing ground for new plays, cinema scenarios, or novels.

# **HARD HAT WON BY COXCOMB**

Superintendent E. A. Bernard and his Coxcomb tunnel crews are the proud and permanent possessors of the "Hard Hat" emblem of efficiency and safety on Division 3, according to an announcement of Division Engineer John Stearns.

The award was made under the rules laid down by Mr. Stearns when the emblem was first put up for competition. At that time it was decreed that "on the completion of the first schedule in Division No. 3, the hat will become the permanent possession of the contractor who has won it the most number of times."

Since the West Leg of Hayfield Tunnel No. 1 was holed out by Hunkin & Conkey crews on January 22, and excavation of Hayfield No. 2 was completed by Shofner & Gordon on February 9, it was determined that the award would be made on the basis of records up to the end of January, 1935.

A compilation of awards during that period revealed that the trophy had been won by Coxcomb for January, February, March, July, September, October, No-

vember and December, of 1934 and January of 1935. Winston's East Iron camp had won it for April, May and June, while L. E. Dixon & Bent Brothers crews obtained it for August.

Award each month was made under the following system: 25 per cent for the lowest accident frequencies for the month; 10 per cent for the cleanest camp; 15 per cent for the cleanest storage yard and approach cut; 25 per cent for the best timber or steel in both lagged and unlagged sections, and 25 per cent for the cleanest adit and tunnel.

The emblem itself is a specially made hard hat, white in color and emblematic of a safe, clean job. Each month the name of the winning contractor and camp was lettered on it.

In announcing the results of the contest this week, Division Engineer Stearns called attention to the fact that Broderick & Gordon's Eagle Mountain job, while it did not succeed in winning the hat for any one month, has shown the greatest improvement of any unit on the Division during the past six months.

# **ENGINEERS FOR SAN JACINTO**

The retention of a group of nationally known engineers to act as consultants on the San Jacinto tunnel of the aqueduct was announced by the office of General Manager Weymouth.

The thirteen-mile San Jacinto bore is now being driven by forces employed directly by the District, following suspension by General Manager Weymouth of a contract held for the job by the construction firm of Wenzel & Henoch.

Members of the board thus far selected include:

D. H. Redinger, of Los Angeles, well known engineer for the Southern California Edison Company, who was in charge of the Florence tunnel and

other major bores for that company.

J. Fred Johnson, of Salt Lake City, consulting engineer for the U. S. Bureau of Mines and widely known contractor for shaft and tunnel work for mining companies.

W. R. Fontaine, of San Francisco, consultant for Six Companies, Inc., on tunnel work at Parker Dam, Broadway tunnels at San Francisco, and Boulder Dam.

Thaddeus Merriman, for many years chief engineer of the New York City Board of Water Supply and a nationally known consultant on engineering problems.

Additional members of the group may be appointed later, it was indicated.

# **PARKER DAM JOB UNDER WAY**

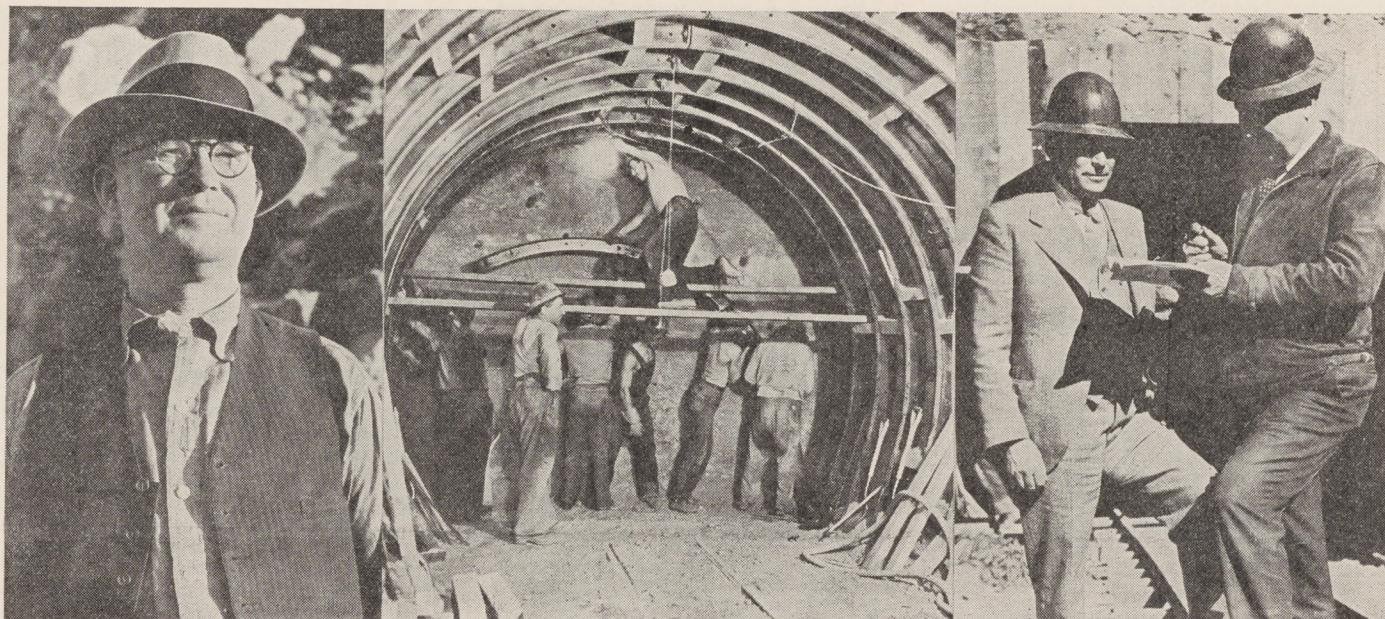
Steadily increasing activity on the Parker Dam unit of the Colorado River Aqueduct was reported this week, as forces of the Reclamation Bureau, Six Companies, Inc., and J. F. Shea Company pressed forward with various phases of the job.

Following the completion of the construction bridge across the river at the dam site by means of a fill, J. F. Shea Company crews are at work on the approach cut excavation at the down-

stream portals of the division tunnels on the Arizona side of the river. The Shea organization is subcontractor for Six Companies on the diversion bores.

Meanwhile, the Reclamation Bureau is continuing with the construction of its camp which will form the new Government town of Whipple, California. Work on the Government camp is reported to be approximately two-thirds completed.





The Colorado River Aqueduct arrives in the Metropolitan Water District area as work gets under way on the Monrovia and Pasadena tunnels of the distribution system. At the left is O. V. Humason, superintendent for the West Construction Company at the west portal of Monrovia Tunnels Nos. 1 and

2. The center view shows the placing of steel-ribs in Pasadena tunnel, with Shifter Claude (Curley) Dahlquist supervising the job. On the right, City Engineer and Superintendent of Streets Harvey W. Hinks, of Pasadena, hears from Resident Engineer George Baker details of District plans.

## TUNNEL CONSTRUCTION WORK IS LAUNCHED ON MONROVIA AND PASADENA BORES

With a large force already on the job, the Metropolitan Water District's latest tunnel driving undertaking—the Pasadena and Monrovia bores of the Colorado River Aqueduct Distribution System—was moving forward with increasing speed this week.

This means that aqueduct construction, for the first time since work was launched on the project, actually is going ahead in the heart of the Metropolitan Water District area which is to be served with water from the Colorado River.

Both the West Construction Company and L. E. Dixon, Bent Brothers, and Johnson have crews at work. Construction is going forward at four points—the west portal of Monrovia Tunnel No. 1, the west portal of Monrovia No. 3, the Fish Canyon adit of Monrovia No. 3, and the west portal of Pasadena tunnel. The work is going forward under the supervision of Distribution Engineer R. B. Diemer.

At the west portal of Monrovia No. 1, the West Company has an average of 14 men working on approach cut excavation and 15 men on camp and plant construction. One seven and one-half hour shift per day is worked. The approach cut and tramway to the dump

site are more than 75 per cent completed; the office, warehouse, and first-aid building more than 95 per cent completed. The transformer station is finished. The concrete foundation for the compressor has been poured, and a compressor and two air receivers are at the site. Other equipment includes 10 four cubic yard dump cars and 20 tons of 45-pound mine rails.

At the west portal of Monrovia No. 3, also a West Company job, an average of 15 men are working on approach cut excavation and 19 men on camp and plant construction a seven and one-half-hour shift per day. The approach cut is more than 70 per cent completed. The status of plant construction is as follows: water system, 75 per cent completed; power line, 100 per cent; transformer station, 60 per cent; office, 90 per cent; change house, 75 per cent; excavation for tramway, 75 per cent; powder magazine, 98 per cent; primer house, 100 per cent, and engineer's office building, 98 per cent. Excavation for compressor foundation is completed and a new compressor is at the site, together with 20 tons of 45-pound rails and three four cubic yard dump cars.

At the Fish Canyon adit, the West Company has started work on an access

road with a small force numbering about five men.

Meanwhile at the west portal of the Pasadena bore, Dixon - Bent - Johnson crews have completed the approach cut and have started underground with wall plate drifts. Full face tunnel excavation was started February 21, and 100 lineal feet had been excavated up to March 1, using mainly pneumatic spades and hand-operated dump cars. Partially cemented alluvium was encountered, varying from fine sand in pockets and layers up to boulders two feet in diameter, and increasing in hardness to the extent that light shooting is now being done.

From the portal, 12 lineal feet have been supported by fully lagged timber sets at three-foot centers, and from this point on by fully lagged steel supports at two-foot centers. This steel spacing will be continued under the railroad. An average of 13 men are working per day on approach cut and tunnel excavation and 30 men on camp and plant.

The status of plant construction is as follows: office, 95 per cent completed; bunkers, 80 per cent; transformer station, 75 per cent; compressor house, 75 per cent; battery house, 75 per cent; warehouse, 75 per cent, and shop, 75 per cent.





Tom McIlvenna, field superintendent for Thompson-Starrett.



Res. Eng. S. C. Walker and Div. Eng. John Stearns talk things over.



Inspector O. J. Thompson, Division No. 3.



Victor Bonander, of von der Hellen & Pearson

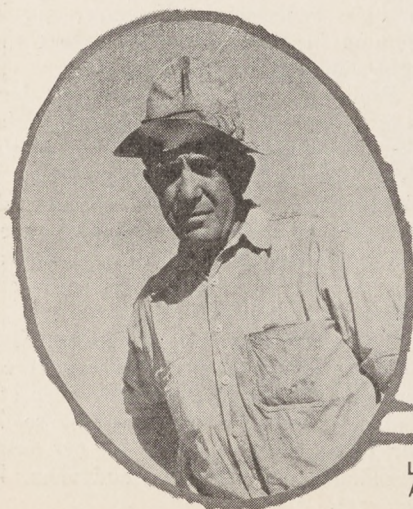


Joe Malmberg powderman for von der Hellen & Pearson, subcontractors for Three Companies.



Fred Nelson, of von der Hellen & Pearson

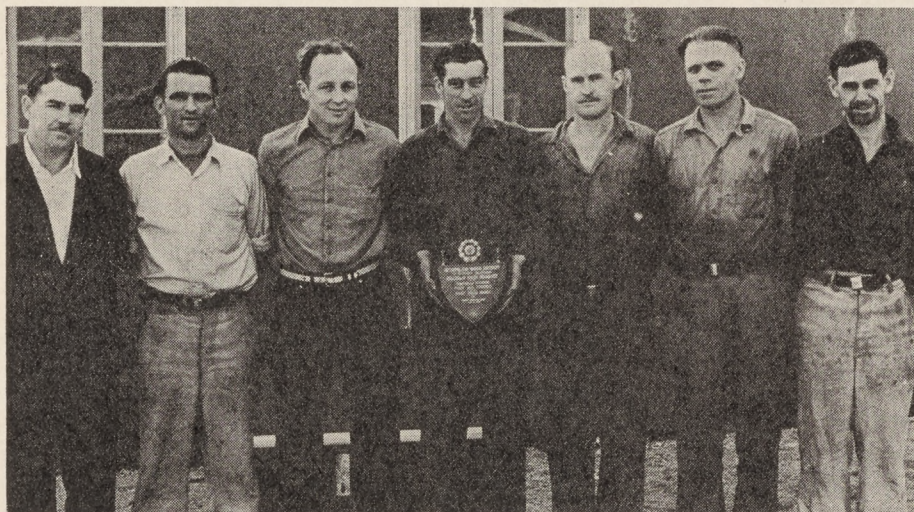
## RANDOM SHOTS Along the Aqueduct



Left—Fred Perkins, powder foreman for Three Companies. Above—Asst. Gen. Mgr. J. L. Burkholder and Supt. C. R. Rankin confer at San Jacinto. Right—Joseph McLearn, Three Companies.







The Fargo first aid team displaying plaque awarded as first prize at the Coachella division inter-camp first aid contest. Left to right—Captain Harry Keegan, Jay L. Reed, Curtis A. Anderson, Harold Fossberg, Arthur Jones, alternate, Oliver H. Engler and H. C. Marble, patient.

## DIRECTORY

### BOARD OF DIRECTORS

W. P. Whitsett, Chairman  
Franklin Thomas, Vice-Chairman  
S. H. Finley, Secretary

Anaheim.....O. E. Steward  
Beverly Hills.....George R. Barker  
Burbank.....J. L. Norwood  
Compton.....William H. Foster  
Fullerton.....Walter Humphreys  
Glendale.....Bernard Brennan  
Long Beach.....William M. Cook  
Los Angeles.....I. Eisner  
Los Angeles.....Perry H. Greer  
Los Angeles.....Otto J. Emme  
Los Angeles.....D. W. Pontius  
Los Angeles.....John R. Richards  
Los Angeles.....Victor H. Rossetti  
Pasadena.....W. P. Whitsett  
Pasadena.....Franklin Thomas  
San Marino.....J. H. Ramboz  
Santa Ana.....S. H. Finley  
Santa Monica.....W. H. Carter  
Torrance.....Charles T. Rippey

Charles H. Toll, Treasurer  
D. W. Pontius, Controller

### GENERAL STAFF

General Mgr. and Chief Engr.....F. E. Weymouth  
Asst. General Manager.....J. L. Burkholder  
Asst. Chief Engineer.....Julian Hinds  
General Counsel.....James H. Howard  
Asst. General Counsel.....Arthur A. Weber  
Asst. Controller.....J. M. Luney  
General Superintendent.....James Munn  
Chief Elec. Engineer.....J. M. Gaylord  
Asst. to Gen. Mgr.....Don J. Kinsey  
Secy. to Gen. Mgr.....Elisabeth von Hagen

### DIVISION ENGINEERS

Division 1.....R. C. Booth  
Division 2.....W. E. Whittier  
Division 3.....John Stearns  
Division 4.....B. C. Leadbetter  
Divisions 5 and 6.....J. B. Bond  
Distribution.....R. B. Diemer

### SUPERINTENDENTS (Tunnel)

Colorado River, Copper Basin and Whipple Mt. Tunnels, Walsh Construction Co., F. T. Huntington, Gen. Supt.; W. A. Huntington and Jack Lamey, Tunnel Supts.  
Coxcomb Tunnel and Iron Mt. shaft, Winston Bros., E. A. Bernard, Gen. Supt.; F. T. Hillman and R. B. Johnson, Tunnel Supts.  
Iron Mt. Tunnel, West Portal, Utah Constr. Co., Ben Arp, Gen. Supt.  
East Eagle Mt. Tunnel and West Eagle Mt. Tunnel, east portion, Broderick & Gordon, C. J. Kavanagh, Gen. Supt.  
West Eagle Mt. Tunnel, west portion, L. E. Dixon and Bent Bros., P. C. Guinn, Gen. Supt.  
Hayfield Tunnel No. 1, Hunkin & Conkey Constr. Co., G. B. Hoag, Gen. Supt.; F. Backlund, Tunnel Supt.  
Hayfield Tunnel No. 2, Shofner & Gordon, H. E. Warden, Gen. Supt.  
Cottonwood Tunnel, J. F. Shea Co., Inc., Gilbert

Shea, Gen. Mgr.; Wallace Young, Master Mechanic.

Mecca Pass Tunnels, Morrison-Knudsen—Completed.

Coachella Division, R. M. Merriman, Division Supt.

Yellow Canyon Adit, E. Coachella Tunnel—District Force Account.....R. L. Bryant

Fargo Adit, East Coachella Tunnel—District Force Account.....J. H. Manwaring

Berdoo Adit, East Coachella Tunnel—District Force Account.....F. A. Weller

Pushawalla Adit, East Coachella Tunnel—District Force Account.....Kenneth MacIsaac

Thousand Palms—District Force Account.....D. L. Reaburn

Wide Canyon—District Force Account.....John Jackman

Long Canyon—District Force Account.....C. E. Sides

Little Morongo—District Force Account.....Whitewater Tunnels, West Constr. Co., H. E. Carleton, Gen. Supt.; Angus MacDonnell, Tunnel Supt.

San Jacinto Tunnel, District Force Account, C. R. Rankin, Gen. Supt.; E. E. McCabe, W. L. Taylor, and Jack Stone, Tunnel Supts.

Bernasconi Tunnel, Hamilton & Gleason Co., H. C. Simpson, Gen. Supt.

Valverde Tunnel, Dravo Contr. Co., R. W. Remp, Gen. Supt.; H. C. Richardson, Asst. Gen. Supt.; Dean Luther, J. R. Glaeser, and Fred Youmans, Tunnel Supts.

### SUPERINTENDENTS (Canal, Siphon, Conduit)

Schedules Nos. 5 and 5A, Jahn & Bressi Construction Company, Joseph Muscolo, Gen. Supt.; Dominick Bressi, Asst. Gen. Supt.; C. M. Ellison, Concrete Supt.

Schedules Nos. 7 and 7A, Barrett & Hilp & Macco Corporation, Jesse S. Smith, Gen. Supt.; H. W. McKinley, Excav. Supt.; Robt. McCune, Concrete Supt.

Schedules Nos. 6, 8, 8A and 8B, Clyde W. Wood and M. J. Bevanda, A. F. Weesner, Gen. Supt.; L. L. Green, Excav. Supt.; A. V. Fisher and V. S. Price, Concrete Supts.

Schedules Nos. 9, 9A, 9B, and 9C, The Utah Construction Company, Ben Arp, Gen. Supt.; E. C. Caldwell, Excav. Supt.

Schedules Nos. 10, 10A and 10B, Aqueduct Construction Company, C. M. Elliott, Gen. Supt.; Charles Harlowe, Jr., Excav. Supt.

Schedules Nos. 12 and 12A, Three Companies, Inc., Charles G. Clapp, Supt.

Schedules Nos. 14, 15 and 16, Thompson-Starrett Co., Inc., William Hayes, Gen. Supt.; Thomas McIlvanna and Joseph Rice, Field Supts.; Rodney Smith, resident engineer.

Schedule 18-J, Morrison-Knudsen, George Fortier, Gen. Supt.

Schedule No. 20, J. F. Shea Co., Inc., H. F. Remnerbohm, Supt.

Schedules Nos. 21 and 23, The Griffith Company, Harry Davis, Supt.

## Safety On the Aqueduct

That safety records being made in connection with Colorado River Aqueduct construction are gaining increasingly wide recognition is evidenced by the following editorial which appeared in the February 21 issue of the Engineering News-Record:

"Week after week reports are received of new tunneling records established on the Colorado River Aqueduct. Old driving records have been relentlessly smashed from one end to the other of that great project, topped by the recent great feat of driving 1,111 ft. of hard-rock heading from one face at Copper Basin No. 2 in 30 days. These reports suggest feverish activity—a pell-mell rush that would leave the inevitable trail of accidents in its wake. Such is not the case. Incredible as it may seem, while the aqueduct has been made the speediest tunneling project in history, it has also been made the safest. Safety here is more than a slogan—it is an actual reality. The entire organization from commission heads to drill runner and chuck-tender—engineering, contracting and force-account crews—has been permeated with the safety idea. Safety is taught and then practiced. Eternal vigilance, attention to every detail and consideration of every suggestion made by the workers are answers to the question of how the accident rate has been cut to less than half of the normal for the state in tunnel work. Over a 242-mile stretch of California desert these tunnel forces are proving that construction hazards can be overcome and that high construction speeds can be obtained without sacrifice of human life and limb. They are giving a convincing demonstration of the place that the tunneling art has reached through the aid of modern machinery and tools and thoroughly studied procedures."

In line with receipt of the above, Safety Engineer Osgood called the NEWS' attention to the following: "We sometimes hear that safe working conditions and safe practices retard progress and increase the cost of construction. Superintendent McCabe and his men of Long Canyon camp have challenged this statement with their January, 1934, record in tunnel construction—having won the safety, economy, and progress flags for that month."



**BEST PROGRESS  
This Period**

 6-day week: Fargo Canyon West, 756 ft.  
 7-day week: Whipple Mt. East, 874 ft.

**TUNNEL PROGRESS**

 February 1 to 28, 1935  
 Tunnel Excavated to Date, 63.22 Miles

**BEST WEEK'S PROGRESS  
This Year**

 6-day week: Seven Palms West, 225 ft.  
 7-day week: Whipple Mt. East, 244 ft.

TUNNELS ON CONTRACT	Length in feet	Number of Shifts	EXCAVATION PROGRESS IN FEET			TUNNELS ON CONTRACT	Length in feet	Number of Shifts	EXCAVATION PROGRESS IN FEET		
			Average Per Shift	This Period	Total to date				Average Per Shift	This Period	Total to date
Walsh Constr. Co. COLORADO RIVER West Portal	(5482) 5482			0	5482	J. F. Shea Co. COTTONWOOD East Portal	(20,105) 10,118		Concrete Progress to Date		
COPPER BASIN, No. 1 West Portal	(705) 705			0	705	West Portal	9987		Arch - 264 ft. Invert - 0		10,118 9987
COPPER BASIN, No. 2 East from adit	(11,568) 1878			0	1878	Morrison-Knudsen MECCA PASS TUNNELS	(5,940)		Work Completed 2-10-35		5940
Adit	330			0	330	West Constr. Co. WHITEWATER No. 1, West Portal	(10,232) 2060		Concrete Progress to Date		
West from adit	9690			0	9690	No. 2, East Portal	8172		Arch - 8877 ft. Invert - 8172 ft.		2060 8172
WHIPPLE MT. East from adit	(32,265) 18,352	84	10.4	874	10,176	Hamilton & Gleason BERNASCONI East Portal	(6220) 6220	53	3.8	202	6200
Adit	924	82	8.4	690	8442	Dravo Contr. Co. VALVERDE East from Shaft 1	(38,765) 2140		Concrete Progress to Date		
West from adit	13,913					Shaft 1	64		Arch - 5024 ft. Invert - 1857 ft.		2140
Winston Bros. IRON MT. East from shaft	(39,759) 9844	78	6.0	469	4978	West from Shaft 1	1525				64
Shaft	165			0	165	East from Shaft 2	5400				4660
West from shaft	13,743	78	8.8	690	9385	Shaft 2	204				204
Utah Constr. Co. IRON MT. West Portal	16,172	84	7.7	648	12,156	West from Shaft 2	5400	79	5.5	436	7138
Winston Bros. COXCOMB East Portal	(17,795) 17,795	72	9.5	685	10,657	East from Shaft 3	6950	78	0.7	58	3933
Broderick & Gordon EAST EAGLE MT. West Portal	(9,442) 9442	61	7.4	449	3738	Shaft 3	192	78	4.4	346	6272
WEST EAGLE MT. East from adit	(26,494) 7871	61	9.8	600	6055	West from Shaft 3	6950	78	3.3	258	898
Adit	2008			0	2008	East from Adit	5117	78	3.0	233	391
West from adit	7974	61	7.7	470	5376	Adit	391				705
Dixon & Bent WEST EAGLE MT. West Portal	10,649	72	6.8	491	8923	West from Adit	5283				
Hunkin & Conkey HAYFIELD, No. 1 East from adit	(9713) 5317	72	6.2	443	5179	West Constr. Co. MONROVIA TUNNELS* No. 1, West Portal	(40,919) 7865				0
Adit	511			0	511	No. 2, West Portal	940				0
West from adit	4396			0	4396	No. 3, East from Adit	11,340				0
Shofner & Gordon HAYFIELD, No. 2 West Portal	(5435) 5435	13	5.5	72	5435	Fish Canyon Adit	1616				0
						No. 3, West from Adit	10,000				0
						No. 3, West Portal	10,774				0
						Dixon, Bent & Johnson PASADENA TUNNEL* West Portal	(12,143) 12,143	30	3.6	107	107
						Total Excav. Contract Tunnels exclusive of Adits and Shafts (In Miles)	292,982 55.49	1292	6.4	8221 1.56	183,246 34.71
TUNNELS ON FORCE ACCOUNT											
EAST COACHELLA TUNNEL	Sched.	(96,605)				LONG CANYON E. Portal	(15,295) 8360	72	10.1	730	6946
Yellow Canyon Adit	1	686		0	686	W. Portal	6935				0
East from adit	1	10,204		505	10,204	BLIND CANYON E. Portal	(6848) —	29	9.0	260	5580
West from adit	1	10,076	72	7.0	11,193	W. Portal	6848				0
Fargo Canyon Adit	2	891		0	891	MORONGO No. 1 E. Portal	(5712) 5712	30	9.2	277	5364
East from adit	2	11,850	72	9.2	9992	W. Portal	—				0
West from adit	2	15,200	72	10.5	8510	MORONGO No. 2 E. Portal	(1820) 1820				0
Berdoo Canyon Adit	3	2042		0	2042	W. Portal	—				0
East from adit	3	15,824	72	8.8	10,886	SAN JACINTO East from Cabazon	(67,415) 8553	74	1.2	89	1882
West from adit	3	12,456	72	9.3	11,435	Cabazon shaft	246				246
Pushawalla Canyon Adit	4	2935		0	2935	Cross drift	935				935
East from adit	4	10,186	72	6.2	8942	West from Cabazon	22,839	74	0	0	4874
West from adit	4	10,809	72	5.9	8678	East from Potrero	20,589	73	0	0	160
WEST COACHELLA TUNNELS		(81,454)				Potrero shaft	796				796
THOUSAND PALMS No. 1, West Portal	5	16,058	72	6.5	9141	West from Potrero	6712	73		470	1455
No. 2, Tunnel	5	3838		0	3838	West Portal	8722	73		425	4953
WIDE CANYON No. 1, E. Portal	Sched. 5	5122	72	8.3	5357	Total excav. Force Acct. Tunnels excl. of Adits and Shafts (In Miles)	245,474 46.49	1290	6.5	8399 1.59	150,551 28.51
No. 1, W. Portal	6	9183	72	6.6	8461	Total Tunnel Excavation (Miles)	101.98		6.4 ft.	3.15	63.22
No. 2 Tunnel	6	848		0	848						
SEVEN PALMS E. Portal	6	(16,730) 8390		0	4810						
W. Portal	7	8340	72	7.0	7042						

\* Distribution System Tunnels—Total length 10.05 miles. Adits and Shafts progress in not included in total footage.



# NEWS FROM FIELD AND OFFICE

Harry Carr, well known writer of the Lancer column in the Los Angeles Times, toured the aqueduct line with Chairman W. P. Whitsett last week.

\* \* \* \*

Mayor William H. Carter of Santa Monica has taken his seat on the District Board of Directors as the new representative of that city. Mayor Carter succeeds Judge Arthur A. Weber.

\* \* \* \*

S. J. Shrode and V. L. Bland, walkers at Long Canyon camp, are now located at the West Portal of San Jacinto tunnel, under Superintendent E. E. McCabe.

\* \* \* \*

Recent Coachella Division transfers to Cabazon shaft of San Jacinto tunnel include Foreman M. D. Simpson from Pushawalla, Storekeeper Robert A. Pitcher of Berdoo, and Nurse John D. Hallor of Yellow.

\* \* \* \*

Frank Laird, mechanical superintendent on the Coachella Division, has been transferred to the Banning Headquarters office with the rank of superintendent of construction.

\* \* \* \*

Another Berdoo-to-Banning transfer is that of Foreman Ben Blair.

\* \* \* \*

Included in the group transferred from Long Canyon camp to the west portal, San Jacinto, are Foreman Royal B. Arrowsmith, Nurse Myron Pexton, Storekeeper Harry Dreyer, and General Clerk Malcolm McKinlay.

\* \* \* \*

Deserting the ranks of the aqueduct bachelors is Erving P. Tucker, Jr., of the Banning staff whose marriage to Miss Roberta Margaret Denny has been announced for the evening of March 9 at the Wilshire Methodist Episcopal Church in Los Angeles. Miss Denny is the daughter of Mr. and Mrs. Robert Roy Denny of Los Angeles.

\* \* \* \*

General interest in aqueduct engineering circles is being evidenced these days in the Manual of Instructions for Concrete Inspectors which has been issued by the District. Published in handy pocket size, the book outlines the approved concrete inspection practice of the Metropolitan Water District. It is supplementary to the specifications, and is intended to be used as a book of reference on matters not covered in detail by them.

## AQUEDUCT TEMPERATURES

Feb. 15 to Feb. 18, Inclusive

Div.	Max.	Min.
1 .....	82°	40°
2 .....	82°	45°
3 .....	82°	40°
4 .....	81°	45°
5 and 6 .....	81°	29°

Pete de Pace, well known along the aqueduct while the construction water system was being installed, is now master mechanic at Cabazon shaft of San Jacinto tunnel.

\* \* \* \*

Walkers Frank Burt and E. J. Sanders of Yellow Canyon camp on the Coachella Division have been transferred to Potrero shaft on San Jacinto tunnel under Superintendent Dick Taylor.



The above artistic masterpiece was submitted by a Coachella Division correspondent with the following editorial notation: "Gone, but not forgotten. Our conception of W. L. (Dick) Taylor, formerly superintendent at Yellow Canyon camp, Division 4, and now in charge at Potrero shaft, San Jacinto tunnel. Kind readers, the wrinkles by the left eye are 'laugh' wrinkles; those on the brow are 'worry' wrinkles (wondering if Yellow is going to get it in the neck again); while those under the chin are caused by a wee bit of chubbiness. Division 4 misses Dick, and we hope he misses us. If not, rest assured we shall let him know we are still here from time to time. By the time this article goes to press he will be well aware of the fact.

Announcement of the engagement of Miss Helen Belatti and Norman Humphrey, of the Division 4 engineering staff, was made recently in Long Beach. No date for the wedding has been announced.

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A second Bucyrus-Monogan dragline was placed in service last week on the Thompson-Starrett Company's open work schedules.

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Foremen J. H. Bell, F. J. von Rader, and Jack Lewis, along with Field Clerks B. V. Earnest and J. B. Eustice have been shifted from Yellow Canyon to Potrero shaft of San Jacinto.

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Father Stork has been a busy man out at Division 3 headquarters recently. The headquarters vital statistic department reports the arrival of a boy in the Bob Lindsay household, a girl at the Courtland Munns, and another boy at the Greer Thompsons.

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With the completion of excavation at that point, Little Morongo camp on the Coachella Division has been shut down. Removal of stores and equipment and the clean-up of the camp area is in progress. Wooden bulkheads with steel doors have been constructed for each tunnel. These will be gunited as a protection from fire.

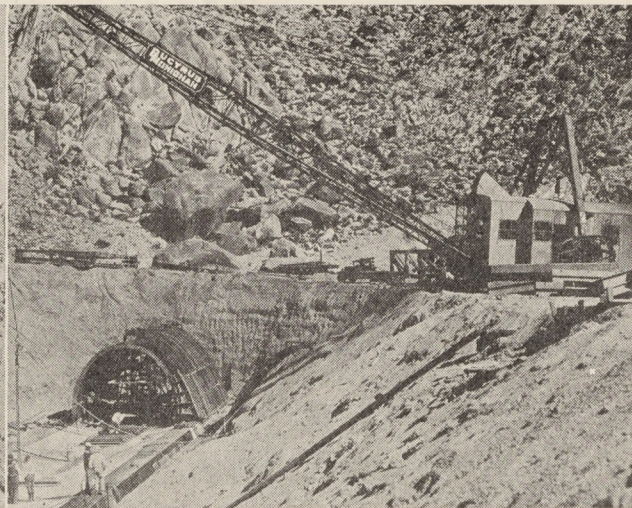
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The following are some of the recent transfers cleared through the Los Angeles personnel office: Inspector Charles K. Lewis from Division 5 to the Design Division, Los Angeles office; Carpenter E. W. Koch from Division 4 to an inspector's post on Division 2; Inspector Louis E. Watson from Division 4 to Division 2.

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It took sleuthing to uncover this item, but careful investigation by AQUE-DUCT NEWS operatives finally has established the fact that Mervin A. Schuhart of the Division 6 engineering staff is single no longer. An item in a Pasadena paper revealed to alert NEWS operatives that Bachelor Schuhart had filed a notice of intention to marry—aided and abetted by Marguerite Mac-Roberts, of Pasadena. But, alas, no one at Division 6 headquarters seemed to have heard of any wedding taking place—especially they had heard no such news from Mr. Schuhart. However, a wedding *did* take place—on February 12.





That tunnel crews have no monopoly on aqueduct hard-rock excavation is evidenced by the two pictures on the left. They are shots of work being done by von der Hellen & Pierson, subcontractors for Three Companies on excavation in connec-

tion with conduit and canal construction on Schedules 12 and 12A. The picture at the right shows steel forms in place on conduit section being built by Thompson-Starrett near Eagle Mountain.

## Whipple Mt. Road Contract Is Awarded

Immediate opening of a new aqueduct construction sector is in view following the award last week by the District board of directors of a \$79,476 contract to Bennett & Taylor, of Los Angeles, for the construction of sixteen miles of road through the rugged Whipple Mountain region near the river.

The new road will be used in connection with the construction and maintenance of a section of the Metropolitan Water District power line from Boulder Dam.

## New Cottages

A contract for the construction of two five-room cottages at Division 2 headquarters was made by the board of directors last week to V. O. Brunzell. The amount involved is \$6,574. The buildings will be used as small dormitories during the construction period, and later converted into family dwellings for members of the staff of the pumping station, which will be located at the headquarters site.

## Two-Mile Mark

Coxcomb tunnel crews passed the two-mile mark at the end of the swing shift on February 26, according to reports from the field. Being driven by Winston Brothers, the tunnel is 17,795 feet.

## Forms Placed for First Conduit Section

Beginning 55 miles of similar construction work, the first Colorado River Aqueduct conduit section took shape last week near Eagle Mountain as Thompson-Starrett crews started the placement of steel forms on Schedule 14.

Meanwhile, on nearby Schedules 12 and 12A crews of Three Companies and its subcontractor von der Hellen & Pierson are moving ahead with excavation for conduit and siphon construction.

Other open work highlights include: Construction by Barrett-Hilp-Macco of 7,000 feet of 2,300-volt transmission line for dragline service on Schedule 3.

Commencement of excavation in Schedule 10A by the Spicer-Robinson-West Company, subcontractors for the Aqueduct Construction Company.

## Index Ready

Attention is called to the fact that the index for Volume 1 of the AQUEDUCT NEWS has been completed by the printer and is ready for distribution. The index page size is the same as that of the regular issues of the NEWS, and may be bound with the 1934 issues of the publication. Copies may be obtained by writing to the AQUEDUCT NEWS, 306 W. Third Street, Los Angeles. Employees in the Los Angeles office wishing an index may leave their names at the information desk on the 11th floor of the headquarters building.

## To Reveal Aqueduct Service Record Next Issue

Who is the holder of the record for the longest period of uninterrupted service on the Colorado River Aqueduct?

That question will be answered in the next issue of the NEWS when announcement is made of the results of the aqueduct service record contest.

Entries have been received from camp superintendents and division engineers all along the aqueduct line. These are being carefully compared and tabulated so there will be no mistake as to the longest record, and announcement will be made in the next issue of the NEWS.

## King Changes Jobs

J. H. King, general superintendent on Hamilton & Gleason's Bernasconi tunnel since the inception of that job, has left his position to take over the superintendency of the Pasadena tunnel job for L. E. Dixon, Bent Brothers, and Johnson, it was learned this week. W. L. Simpson has succeeded Mr. King at Bernasconi.

## With Fair Staff

Of interest to scores of his friends along the aqueduct line will be the news that Harry Morgan, former chief clerk in the Banning office, has accepted a post with the California Pacific International Exposition, San Diego, as manager of the Department of Special Activities.